

**REMARKS**

In the present amendment, claim 1 has been amended and claims 2 and 4 have been cancelled. Accordingly, claims 1 and 3 are pending in the application with claim 1 being independent.

Applicants note that claim 1 has been amended by adding and clarifying method aspects. Support for the claim amendments can be found in the present specification, e.g., at paragraphs [0055], [0057] and [0059] of the published application.

No new matter has been added.

**Response to rejection under 35 U.S.C. § 103(a)**

The Office Action rejects claims 1 and 3 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chang (Journal of Materials Science Letters, 2001, Vol.20, pp. 1199-1201), hereinafter “CHANG,” in view of Lee et al. (Yonsei Medical Journal, 2001, Vol. 42, No. 2, pp. 172-179), hereinafter “LEE.” The Office Action maintains the position of the previous Office Action and underlines its argument by referring to LEE, Abstract and Table 1, stating that this “demonstrates the relation between freezing temperature and pore size of the collagen-based membrane materials,” and that “lower freezing temperature will shorten the freezing time needed.”

Applicants respectfully traverse the rejection. Applicants submit that, in an attempt to advance prosecution of the present application and without expressing agreement with or acquiescence to the rejection, claim 1 has been amended by adding method steps and expressing even more clearly the features of the present invention. Amended claim 1 recites “freezing pluralities of gels at various freezing-environment temperatures and measuring the solidification time of each gel to prepare a

graph showing the relation between the freezing-environment temperature and the solidification time, measuring the average pore diameter of the porous body obtained at various lengths of solidification time to prepare a graph showing the relation between solidification time and average pore diameter, determining the solidification time for providing a desired average pore diameter of said porous body from the graph of the solidification time and the average pore diameter, and determining the freezing-environment temperature for achieving the determined solidification time from the graph of the freezing-environment temperature and the solidification time.” Support for the amendments can be found, e.g., in paragraphs [0055], [0057], [0059] of the published application.

Applicants point out that CHANG discloses a method of preparing porous apatite/collagen composite materials, while LEE discloses a relation between freezing temperature and pore size of the collagen-based membrane materials. Applicants note that the disclosures of CHANG and LEE only teach the relation between the average pore diameter and the freezing-environment temperature, however, CHANG and LEE fail to disclose the relation between the average pore diameter and the solidification time. There is no teaching in CHANG or LEE to use the solidification time as a parameter to control the relation between the average pore diameter and the freezing environment temperature. Accordingly, CHANG and LEE also do not disclose a graph specifying the relation between solidification time and average pore diameter as employed by the presently claimed invention. Applicants note that reading such teaching into CHANG and LEE would be hindsight, based on the teaching of the present application. The Court of Appeals for the Federal Circuit has repeatedly cautioned against employing hindsight by using a patent applicant’s disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. *See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

Moreover, it is established law that one “cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *Ecolochem, Inc. v. Southern Calif. Edison Co.*, 227 F.3d 1361 (Fed. Cir. 2000), (citing *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988)).

In view of the amendments of claim 1 and above presented arguments, the presently claimed invention can be clearly distinguished over the combination of CHANG and LEE, wherefore withdrawal of the obviousness rejection of claims 1 and 3 is respectfully requested.

### **CONCLUSION**

In view of the foregoing, it is believed that all the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Respectfully Submitted,  
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